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Recra LabNet Philadelphia **Analytical Report**

Client: TNU-HANFORD

RFW#:9801L261 SDG#: H0130

W.O. #: 10985-001-001-9999-00

Date Received: 01-24-98

INORGANIC CASE NARRATIVE

1. This narrative covers the analysis of 1 water sample.

- 2. The sample was prepared and analyzed in accordance with the method checked once attached glossary.
- Sample holding time as required by the method and/or contract was not met as the sample 3. was received past hold.
- The cooler temperature was recorded on the chain-of-custody. 4.
- 5. The method blank was within method criteria.
- 6. The Laboratory Control Samples (LCS) were within the laboratory control limits. The duplicate LCS was within the 20% Relative Percent Difference (RPD) control limit.

MAR 1998 RECEIVED

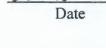
J. Michael Taylor

Vice President and Laboratory Manager

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The results presented in this report relate only to the analytical testing and conditions of the samples at receipt and during storage. All pages of this report are integral parts of the analytical data. Therefore, this report should only be reproduced in its entirety of 10 pages.



WET CHEMISTRY METHODS GLOSSARY FOR ANALYSIS OF WATER SAMPLES

	EPA 600	SW846	<u>OTHER</u>
Acidity	305.1		
_Alkalinity _Bicarbonate _Carbonate	_310.1		
BOD	_405.1		_5210B (b)
Ion Chromatography:			
_Bromide _Chloride _Fluoride	300.0	_9056	
NitriteNitratePhosphate	300.0	_9056	
_Sulfate _Formate _Acetate _Oxalate	300.0	_9056	
Chloride	325.2	_9251	
Chlorine Residual	_330.5 (mod)		
Cyanide Amenable to Chlorination	335.2	_9010A	
Cyanide (Total)	335.2	_9010A _9012	_ILM04.0 (e)
Cyanide, Weak Acid Dissociable	_		_412 (a) _4500CN-I (b)
COD	410.4 (mod)		5220 C (b)
Color	110.2		
Corrosivity (by Coupon)	_	1110 (mod)	
Chromium VI		√7196A	3500Cr-D (b)
Fluoride	340.2	_	_
Hardness, Calcium	215.2		
Hardness, Total	130.2		
Iodide	_		_ASTM D19P202 (1)
Surfactant	425.1	•	
_Nitrate-Nitrite _ Nitrate _ Nitrite	353.2		
Ammonia	350.3		
Total_Kjeldahl Nitrogen _Organic Nitrogen	351.4		·
Total Organic Inorganic Carbon	415.1	9060	
Oil and Grease	413.1	9070	
pH pH, Paper	150.1	9040A 9041A	
Petroleum Hydrocarbons, Total Recoverable	418.1		
Phenoi	420.1 420.2	9065 9066	
_Ortho Phosphate Total Phosphate	365.2	_9003 _9000	4500-P B C
Salinity rotal r nospitate	303.2		
Settleable Solids	160.5		_210A (a) _2520B (b)
Sulfide		0020 4	
Reactive Cyanide Sulfide	_376.2 _376.1	9030A	
SilicaSunde	370.1	_Sec 7.3	
Sulfite	_		
Sulfate	_377.1	0000	
Specific Conductance	_375.4	_9038	
Specific Gravity	120.1	9050	
_TCLP _TCLV			_213E (a)
Synthetic Precipitation Leach		_1311	
	100	_1312	
Total _Dissolved _Suspended _Solids	160123	440	
Total Organic Halides	_450.1	_9020B	
Turbidity Volatile Solide Total Dischard Second 1	_180.1	•	
Volatile SolidsTotalDissolvedSuspended			
Other:	Method:		2
RFW 21-21-034/A-08/95			c 0.3

METHOD REFERENCES AND DATA QUALIFIERS

DATA QUALIFIERS

- U = Indicates that the parameter was not detected at or above the reported limit. The associated numerical value is the sample detection limit.
- * = Indicates that the original sample result is greater than 4x the spike amount added.

ABBREVIATIONS

MB = Method or Preparation Blank.

MS = Matrix Spike.

MSD = Matrix Spike Duplicate.

REP = Sample Replicate

LC = Laboratory Control Sample.

NC = Not calculated.

A suffix of -R, -S, or -T following these codes indicate a replicate, spike or sample duplicate analysis respectively.

ANALYTICAL WET CHEMISTRY METHODS

- ASTM Standard Methods.
- USEPA Methods for Chemical Analysis of Water and Wastes (USEPA 600/4-79-020).
- 3. Test Methods for Evaluating Solid Waste (USEPA SW-846).
- a. Standard Methods for the Examination of Water and Waste, 16 ed., (1989).
- b. Standard Methods for the Examination of Water and Waste, 17 ed., (1983)
- c. <u>Method of Soil Analysis</u>, Part 1, Physical and Mineralogical Methods, 2nd. Ed. (1986)
- d. Method of Soil Analysis, Part 2, Chemical and Microbiological Properties, Am. Soc. Agron., Madison, WI (1965)
- e. USEPA Contract Laboratory Program, Statement of Work for Inorganic Analysis.
- f. Code of Federal Regulations.

RFW 21-21L-034/D-06/96

Recra LabNet - Lionville

INCRGANICS DATA SUMMARY REPORT 02/10/98

CLIENT: TNU-HANFORD

RECRA LOT #: 9801L261

WORK ORDER: 10985-001-001-9999-00

					REPORTING	DILUTION
SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	LIMIT	FACTOR
	=======================================	***********	=======		========	
-001	BOMLMO (F)	Chromium VI	0.085	MG/L	0.020	1.0